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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,535	02/05/2004	Eizo Kanatani	248483US0	2817
22850 7590 05/17/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAMINER	
			SOROUSH, ALI	
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			1616	
			NOTIFICATION DATE	DELIVERY MODE
			05/17/2007	ELECTRONIC

### Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

	<del></del>	Application No.	Applicant(s)			
Office Action Summary		10/771,535	KANATANI ET AL.			
		Examiner	Art Unit			
		Ali Soroush	1616			
Period fo	The MAILING DATE of this communication app		l I			
		/ IO OET TO EVOIDE - MONTH	0) 00 7/1/20/10/10			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>04 De</u>	ecember 2006.				
	This action is <b>FINAL</b> . 2b) This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposit	on of Claims					
4)🖂	4)⊠ Claim(s) <u>1,2,6,7 and 12-31</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
	6) Claim(s) 1,2,6,7 and 12-31 is/are rejected.					
	Claim(s) is/are objected to.					
8)	Claim(s) are subject to restriction and/or	election requirement.				
Applicati	on Papers					
9)[	The specification is objected to by the Examiner	-,				
10)	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
	Applicant may not request that any objection to the o	- · ·	` ,			
44)	Replacement drawing sheet(s) including the correcti		• •			
11)	The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.			
Priority ι	ınder 35 U.S.C. § 119		,			
_	Acknowledgment is made of a claim for foreign ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).			
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the priori		d in this National Stage			
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
	dee the attached detailed Office action for a list t	or the certified copies not receive	a.			
Attachmen			ì			
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
3) 🔲 Inforr	nation Disclosure Statement(s) (PTO/SB/08)	. 5) 🔲 Notice of Informal Pa				
Pape	r No(s)/Mail Date	6) Other:				

#### **DETAILED ACTION**

### Acknowledgment of Receipt

Receipt of Applicant's response filed on 12/04/2006 to Office Action mailed on 08/04/2006 is acknowledged.

### Status of Claims

Claims 3-5 and 8-11 have been cancelled, claims 12-31 have been newly added, and claims 1, 2, 6, and 7 have been amended in an amendment submitted with the aforementioned response. Therefore, claims 1, 2, 6, 7, and 12-31 are currently pending examination on the merits for patentability.

### Applicant's Arguments

- 1. Rejection of claims 1, 2, 6, 7, and 11 under 35 U.S.C. 102(b) in view of Japanese Patent Application Publication JP2001187775A as evidenced by The Merck Index, 10<sup>th</sup> edition, pp. 1100, 1232, and 1233 (1983) is withdrawn in light of the amendments filed on 12/04/2006.
- 2. Applicant asserts unexpected benefits/results over the prior art. Applicant's assertion of unexpected benefits/results, found on pages 11-13 of the aforementioned response, is not a comparison of the closest prior art of record (See MPEP 716.02). However, assuming arguendo that the assertion of unexpected benefits/results is a comparison of the prior art of record it is not commensurate in scope to the claimed invention. For instance applicant uses a specific amide group-containing guanidine, lauramide butylguanidine, in the formulation. However purported unexpected results of a single species does not provide support for unexpected results for an entire genus.

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Further applicant uses 0.1 or 0.2 % by weight of lauramide butylgaunidine, which does not provide support for the wide range of concentrations that are encompassed in applicant's claims. For the foregoing reasons applicant's argument is not found to be persuasive.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Applicant Claims
- 2. Determining the scope and contents of the prior art.
- 3. Ascertaining the differences between the prior art and the claims at issue; and resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 1. Claims 1, 2, 6, 7, 12, and 19-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harushiro et al. (Japanese Patent Application Publication 2001-187775, Published 07/10/2001) in view of von Mallek (US Patent 5888489, Published 03/30/1999).

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### **Applicant Claims**

Applicant claims a liquid composition comprising at least one amide group-containing guanidine compound or salt thereof and at least one inorganic salt selected from sodium chloride, potassium chloride, or a mixture thereof in a ratio of 1:0.5 to 1:20. Wherein it may further comprise an ampholytic surfactant.

## Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Harushiro et al. teaches an amide group-containing guanidine compound or salt thereof in an aqueous preparation having surfactants and electrolytes to be used as cosmetics, skin applications, or cleaning agents. (See page 8, paragraph 0031). The amide group-containing guanidine compound has the following formula:

$$R_1$$
 $R_2$ 
 $R_2$ 
 $R_3$ 
 $R_3$ 
 $R_4$ 
 $R_3$ 

where R<sub>1</sub> is a linear or branched chain alkyl group having 1-22 carbon atoms or alkenyl; R<sub>2</sub> and R<sub>3</sub> are can be the same or different linear or branched alkyl group of 1-4 carbon atoms, a hydroxyl alkyl group, or a hydrogen atom; A is linear or branched alkylene or alkenylene group of 1-10 carbons. (See page 3 and 4, paragraph 0005). Harushiro et al. teaches in example 7 the use of the amide group-containing guanidine compound in a shampoo composition. The composition comprises 0.7% amide group-containing guanidine compound, lauramide ethylgaunidine hydrochloride. (See page 11, paragraph 0041 and page 8, paragraph 0032).

# Ascertainment of the Difference Between Scope of the Prior Art and the Claims (MPEP §2141.012)

Harushiro et al. does not specify the electrolyte claimed. Secondly, Harushiro et al. does not teach ampholytic surfactants. The teachings of von Mallek cure these deficiencies.

Von Mallek teaches that a component that can be "present in hair conditioning shampoo of the present invention is an electrolyte which is used in order to increase the viscosity of the composition. Examples of suitable electrolytes include, but are not limited to, salts such as sodium and potassium chloride. The electrolyte may be present in the composition in an amount ranging from about 0.5 to about 2.0% by weight, preferably 1.0 to about 1.5% by weight, based on the weight of the composition." (See column 7, Lines 21-29). Von Mallek further teaches that the shampoo composition comprises an amphoteric surfactant particularly betaines such as coco-amidopropyl betaines. (See column 4, Lines 58-59 and abstract).

## Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Harushiro et al. and von Mallek. One would have been motivated to do this because Harushiro et al. teaches that the amide group-containing guanidine compound can be used with electrolytes in an application as a shampoo. The teachings of von Mallek show the use of sodium chloride or potassium chloride as electrolytes in a shampoo application in order to increase the viscosity of the

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shampoo composition. Therefore, one would have expected that in order to increase the viscosity of the Harushiro et al. composition one would add sodium chloride or potassium chloride electrolytes taught by von Mallek. Also, one would expect such a combination to be successful because Harushiro et al. teaches that electrolytes can be used in shampoo compositions comprising amide group-containing quanidine compounds. Further, Harushiro et al. teaches that the shampoo composition can have surfactants. Von Mallek teaches that a shampoo composition can have a number of surfactants including an ampholytic surfactant. Therefore, it would have been obvious to one of ordinary skill in the art to use ampholytic surfactants of von Mallek among other surfactant types taught in the prior art because shampoo compositions routinely use surfactants and Harushiro et al. teaches that amide group-containing guandine compounds can be used in shampoo compositions with surfactants. Therefore, one would have been motivated to combine the teachings of Harushiro et al. and von Mallek in order to provide a shampoo composition comprising amide group-containing guanidine compound, sodium chloride or potassium chloride electrolytes, and ampholytic surfactants. In regards to the ratio of amide group-containing quanidine compound to inorganic salt in a liquid composition one would have necessarily achieved the instantly claimed ratios from the given concentrations taught by Harushiro et al. and von Mallek. For the foregoing reasons the instantly claimed liquid composition would have been obvious to one of ordinary skill in the art at the time of the invention.

2. Claims 1, 2, 6, 7, 12, 16-18 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koji (Japanese Patent Application Publication 07-233031, Published 09/05/1995) in view of von Mallek (US Patent 5888489, Published 03/30/1999).

### **Applicant Claims**

Applicant claims a liquid composition comprising at least one amide group-containing guanidine compound or salt thereof and at least one inorganic salt selected from sodium chloride, potassium chloride, or a mixture thereof in a ratio of 1:0.5 to 1:20. Wherein it may further comprise a nonionic surfactant.

### Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Koji teaches a shampoo composition composed of a nonionic surfactant in combination with a guanidine derivative. (See abstract). The guanidine derivative has the following formula:

$$R_5$$
  $A$   $HN$   $NH_2$ 

where  $R_5$  is a linear or branched alkyl or alkenyl of carbon 1-22, preferably 11-19, such as C11H23. A can be linear or branched chain alkylene or alkenylene of carbon 1-10, preferably 2-6, such as a butylene radical. (See page 3, paragraph 0012). The nonionic surfactant is a sugar-alcohol ester. (See page 2, paragraph 0009). Koji teaches that a shampoo composition comprises of 20% guanidine derivative. (See Table 1 and

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paragraph 0028). The composition may further include additional surfactants as well as other auxiliary additives. (See page 4, paragraphs 0017 and 0018).

# Ascertainment of the Difference Between Scope of the Prior Art and the Claims (MPEP §2141.012)

Koji does not teach the instantly claimed sodium chloride and potassium chloride. The teachings of von Mallek cure these deficiencies.

Von Mallek teaches that a component that can be "present in hair conditioning shampoo of the present invention is an electrolyte which is used in order to increase the viscosity of the composition. Examples of suitable electrolytes include, but are not limited to, salts such as sodium and potassium chloride. The electrolyte may be present in the composition in an amount ranging from about 0.5 to about 2.0% by weight, preferably 1.0 to about 1.5% by weight, based on the weight of the composition." (See column 7, Lines 21-29). Von Mallek further teaches that the shampoo composition comprises an amphoteric surfactant particularly betaines such as coco-amidopropyl betaines. (See column 4, Lines 58-59 and abstract).

## Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Koji and von Mallek. One would have been motivated to do this because Koji teaches that the amide group-containing guanidine compound can be used with auxiliary additives in an application as a shampoo. The teachings of von Mallek show the use of sodium chloride or potassium chloride as electrolytes in a shampoo application in order to increase the viscosity of the shampoo

composition. Therefore, one would have been motivated to combine the teachings of Koji and von Mallek in order to provide a shampoo composition comprising amide group-containing guanidine compound, sodium chloride or potassium chloride electrolytes, and nonionic surfactants. One would have expected that in order to increase the viscosity of the Koji composition one would add sodium chloride or potassium chloride electrolytes taught by von Mallek. In regards to the ratio of amide group-containing guanidine compound to inorganic salt in a liquid composition one would have necessarily achieved the instantly claimed ratios from the given concentrations taught by Koji and von Mallek. For the foregoing reasons the instantly claimed liquid composition would have been obvious to one of ordinary skill in the art at the time of the invention.

3. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harushiro et al. (Japanese Patent Application Publication 2001-187775, Published 07/10/2001) in view of von Mallek (US Patent 5888489, Published 03/30/1999) further in view of Kamiya (US Patent 632166 B1, Published 11/27/2001).

### **Applicant Claims**

Applicant claims a liquid composition comprising at least one amide group-containing guanidine compound or salt thereof and at least one inorganic salt selected from sodium chloride, potassium chloride, or a mixture thereof in a ratio of 1:0.5 to 1:20. Wherein it may further comprise an organic acid salt.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The combined teachings of Harushiro et al. and von Mallek have been discussed above.

Ascertainment of the Difference Between Scope of the Prior Art and the Claims

(MPEP §2141.012)

The combined teachings of Harushiro et al. and von Mallek do not teach the instantly claimed organic acid salt. The teachings of Kamiya cure this deficiency.

Kamiya teaches shampoo compositions that may further comprise sodium lactate. (See column 4, Lines 1-2). Sodium lactate can be added to the shampoo composition in an amount of 0.5-10% by weight, preferably 1.0-5.0% by weight. (See column 4, Lines 24-26). Kamiya further teaches that sodium lactate acts as thickener and thereby make the detergency milder. (See column 4, Lines 4-7).

# Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Harushiro et al. and von Mallek with Kamiya. One would have been motivated to do this because Kamiya teaches that the addition of such a compound would act as thickener of the composition which would then make the detergency of the composition milder. Therefore, if one would have been motivated to combine the teachings of Harushiro et al. and von Mallek with Kamiya in order to provide a shampoo composition comprising amide group-containing guanidine compound, sodium chloride or potassium chloride electrolytes, and sodium lactate. In regards to the ratio of amide group-containing guanidine compound to inorganic salt in a

liquid composition one would have necessarily achieved the instantly claimed ratios from the given concentrations taught by Harushiro et al. and von Mallek. For the foregoing reasons the instantly claimed liquid composition would have been obvious to one of ordinary skill in the art at the time of the invention.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number For the organization where this application or proceeding is assigned is 571-273-8300.

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Ali Soroush Patent Examiner Art Unit: 1616

> Johann Richter, Ph.D., Esq. Supervisory Patent Examiner Technology Center 1600